AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A backplane for a communications system, that includes a plurality of differential signal line pairs~~ with each differential signal line pair providing a communications path for a differential signal pair~~, comprising:

a first differential signal line pair of the plurality of differential signal line pairs having a first differential signal line and a second differential signal line, wherein each differential signal line, of the first differential signal line pair, includes a first end and a second end;

a second differential signal line pair of the plurality of differential signal line pairs having a third differential signal line and a fourth differential signal line, wherein each differential signal line, of the second differential signal line pair, includes a first end and a second end;

a plurality of vias, including first, second, third, fourth, fifth and sixth vias, wherein each via couples ~~a differential signal line~~ to a corresponding connector terminal;

the first differential signal line providing a communications path for a first forward signal~~ of the first differential signal pair~~, wherein the first end of the first differential signal line is coupled to the first via and the second end of the first differential signal line is coupled to the second via;

the second differential signal line providing a communications path for a first reverse signal ~~of the first differential signal pair~~, wherein the first end of the second differential signal line is coupled to the third via and the second end of the second differential signal line is coupled to the fourth via;

the third differential signal line providing a communications path for a second forward signal ~~of the second differential signal pair~~, wherein the first end of the third differential signal line is coupled to the fifth via and the second end of the third differential signal line is coupled to the sixth via; and,

wherein the first via is spatially located adjacent to the fifth via to cause the second forward signal to have a first amount of coupling to the first forward signal and wherein the fourth via is spatially located adjacent to the sixth via to cause the second forward signal to have a second amount of coupling to the first reverse signal and wherein, without adding coupling specifically for the purpose of reducing crosstalk, the first and second amounts of coupling cause the coupling between the second forward signal and the first forward signal to be substantially equal to the coupling between the second forward signal and first reverse signal.

2. (Previously presented) The backplane of claim 1 further including a plurality of conductor planes wherein the second forward signal is on a conductor plane of the plurality of conductor planes and the first forward and first reverse signals are on another conductor plane of the plurality of conductor planes.

3. (Currently amended) The backplane of claim 1 further including a plurality of conductor planes wherein the second forward signal is on a conductor plane of the plurality of conductor planes and the first forward and first reverse signals are on the same conductor plane of the plurality of conductor planes as the

second forward signal.

4. (Previously presented) The backplane of claim 1 wherein the second differential signal line includes a skew adjustment path located between the first end and the second end.

5. (Previously presented) The backplane of claim 4 wherein the lengths of the first and second differential signal lines of the first differential signal line pair are substantially equal.

6. (Previously presented) The backplane of claim 1 wherein the second via is spatially separated from the fifth and sixth vias such that there is substantially no coupling between the first forward and second forward signals based on the spatial relationship of the second, fifth and sixth vias.

7. (Previously presented) The backplane of claim 1 wherein the third via is spatially separated from the fifth and sixth vias such that there is substantially no coupling between the first reverse and second forward signals based on the spatial relationship of the third, fifth and sixth vias.

8. (Currently amended) A backplane for a communications system, that includes a plurality of differential signal line pairs ~~with each differential signal line pair providing a communications path for a differential signal pair~~, comprising:

a first differential signal line pair of the plurality of differential signal line pairs having a first differential signal line and a second differential signal line, wherein each differential signal line, of the first differential signal line pair, includes a first end and a second end;

a second differential signal line pair of the plurality of differential signal line pairs having a third differential signal line and a fourth differential signal line, wherein each differential signal line, of the second differential signal line pair, includes a first end and a second end;

a plurality of vias, including first, second, third, fourth, fifth, sixth, seventh and eighth vias, wherein each via couples ~~a differential signal line~~ to a corresponding connector terminal;

the first differential signal line providing a communications path for a first forward signal, wherein the first end of the first differential signal line is coupled to the first via and the second end of the first differential signal line is coupled to the second via;

the second differential signal line providing a communications path for a first reverse signal, wherein the first end of the second differential signal line is coupled to the third via and the second end of the second differential signal line is coupled to the fourth via;

the third differential signal line providing a communications path for a second forward signal, wherein the first end of the third differential signal line is coupled to the fifth via and the second end of the third differential signal line is coupled to the sixth via;

the fourth differential signal line providing a communications path for a second reverse signal, wherein the first end of the fourth differential signal line is coupled to the seventh via and the second end of the fourth differential signal line is coupled to the eighth via;

wherein:

the first via is spatially located adjacent to the fifth via to cause the second forward signal to have a first amount of coupling to the first forward signal;

the second via is spatially located adjacent to the eighth via to cause the second reverse signal to have a second amount of coupling to the first forward signal;

the third via is spatially located adjacent to the seventh via to cause the second reverse signal to have a third amount of coupling to the first reverse signal;

the fourth via is spatially located adjacent to the sixth via to cause the second forward signal to have a fourth amount of coupling to the first reverse signal; and

wherein, without adding coupling specifically for the purpose of reducing crosstalk, a first amount of crosstalk induced onto the first forward signal from the first amount of coupling and the second amount of coupling, is substantially equal to a second amount of crosstalk induced onto the first reverse signal from the third amount of coupling and the fourth amount of coupling.

9. (Currently amended) The backplane of claim 8 further including a plurality of conductor planes, wherein~~, for~~ each differential signal line pair includes a signal line carrying a forward differential signal and a signal line carrying a reverse differential signal, wherein the signal line carrying the ~~a~~ forward differential signal ~~line~~ is located on one of the plurality of conductor planes, and wherein the signal line carrying the ~~a~~ reverse differential signal line is located on another one of the plurality of conductor planes.

10. (Currently amended) The backplane of claim 8 further including a plurality of conductor planes, wherein~~, for~~ each differential signal line pair includes a signal line carrying a forward differential signal and a signal line carrying a reverse differential signal, both of which signal lines~~, a forward and a reversse differential signal line~~ are located on the same one of the plurality of conductor planes.

11. (Previously presented) The backplane of claim 8 wherein the second differential signal line of the first differential signal pair includes a skew adjustment path located between the first end and the second end.

12. (Original) The backplane of claim 11 wherein the lengths of the first and second differential signal lines of the first differential signal pair are substantially equal.

13. (Currently amended) The backplane of claim 11 wherein the ~~first~~ third and ~~second~~fourth differential signal lines of the second differential signal pair include a layout having a topology that corresponds to the topology of the skew adjustment path.

14. (Original) The backplane of claim 13 wherein lengths of each differential signal lines of the first and second differential signal pairs are substantially equal.

15. (Original) The backplane of claim 11 wherein lengths of each differential signal lines of the first and second differential signal pairs are substantially equal.